

National Aeronautics and Space Administration



NASA IT Programs and Projects: A New Governance Model

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Topics

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- First things first: what this talk is about
- Where we came from
- How we got here
- Where we are
- Where we are going



First Things First: What This Talk is About

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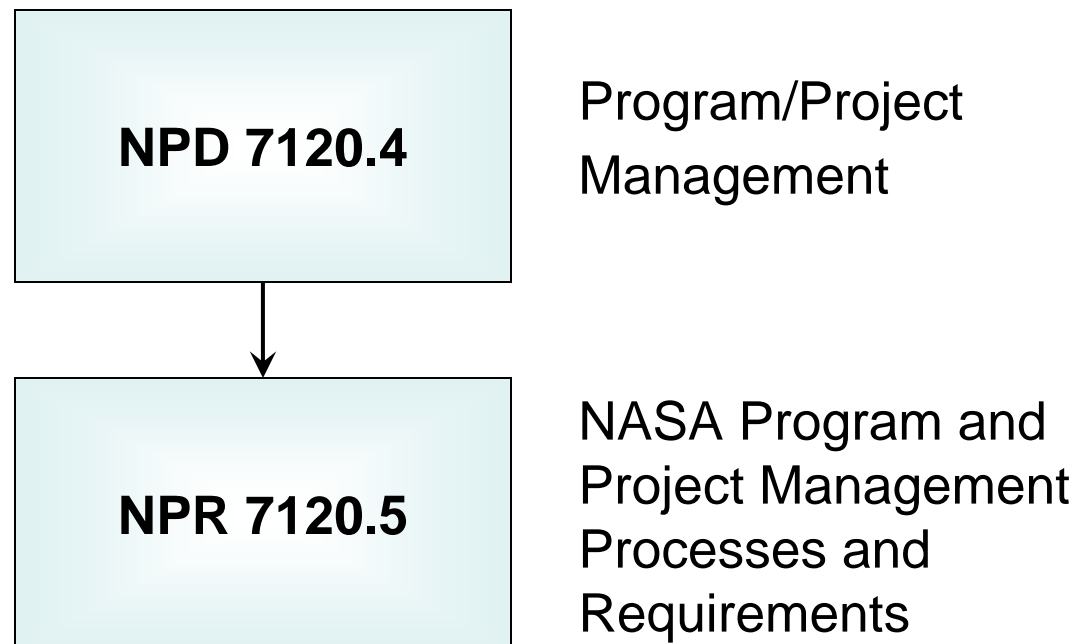
- This presentation is about how NASA has put in place a new governance model for IT programs and projects subject to NPR 7120.7, Information Technology and Institutional Infrastructure Program and Project Management Requirements
 - More later about this NPR and what is in and out of scope!



Where We Came From

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- In the beginning, all types of NASA programs and projects were subject to one NPD and one NPR

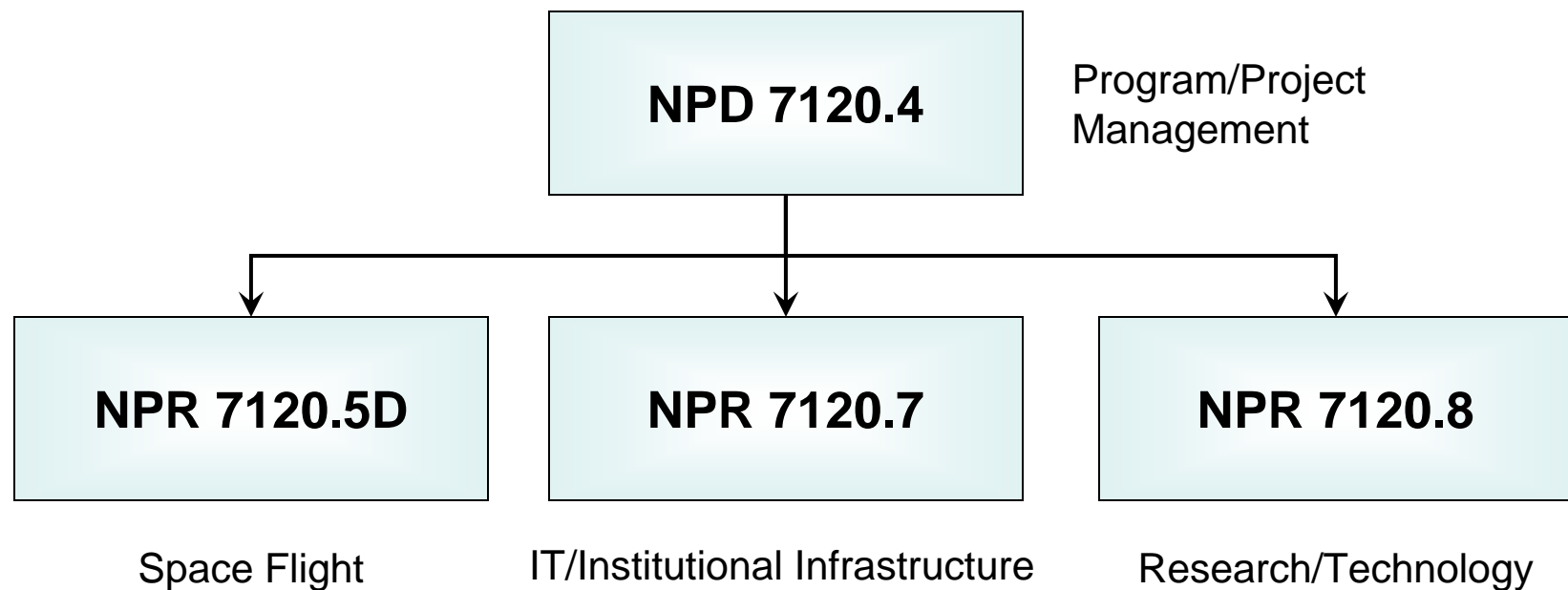




How We Got Here

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- In 2006, the Agency began to break out space flight, research/technology, and IT/institutional infrastructure into separate NPRs





How We Got Here

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- During the process of approving NPR 7120.7, there was extensive discussion with reviewers about the appropriate scope of the IT requirements in the NPR
 - IT is an important part of virtually all NASA programs and projects
 - How do we distinguish NPR 7120.7 scope from that of NPR 7120.5D and NPR 7120.8?
- Decision: NPR 7120.7 applies to IT that is not Highly-Specialized
- Highly Specialized IT: part of, internal to, or embedded in a Mission platform
 - Not simply explained: definition/examples more than 16 lines long in the NPR
- Complicating factor: some projects contain a mix of Highly Specialized and Non-Highly Specialized IT
 - Office of the CIO and Mission Directorates will work together in these cases to rationalize oversight
 - Project managers need to understand the project management requirements they need to meet and the governance structure that will oversee their projects



Where We Are

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- The Agency is implementing NPR 7120.7 and, along with it, the new governance structure for IT programs and projects it requires
 - Scope of the NPR is all programs and those projects with LCC \$500K or more
- Two levels of governance
 - Agency IT Program Management Board (PMB)
 - Center-level IT Project Management Boards (PMBs)
- Agency IT PMB oversees
 - All IT programs as delegated by the Agency Operations Management Council (OMC)
 - IT projects with Development/Maintenance/Enhancement costs of \$1M or more
 - Projects with high impact/visibility/risk
- Center-level IT PMBs oversee remaining projects subject to NPR 7120.7 and others as they deem necessary
 - Centers are recognizing need for project management disciplines for even very small projects, e.g., (\$200K)



Where We Are

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The IT PMB works to ensure that investments approved by the IT Strategy and Investment Board stay on track



Where We Are

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- Agency IT PMB Membership
 - Chaired by Deputy CIO (NASA CIO is Decision Authority)
 - 2 representatives from Mission Directorates
 - 2 representatives from Centers (not from Center CIO organization)
 - 1 representative from Office of Chief Engineer
 - 1 representative from IT Management Board
 - 1 representative (ex officio) from OCIO Policy and Investment Management Division
- Meets monthly or more often as needed by programs/projects
- Responsibilities
 - Makes recommendation to Decision Authority at Key Decision Points (KDPs) on programs/projects moving to next life cycle phase
 - Reviews program/project status on a rotating quarterly basis to ensure progress/help resolve issues; also furnished with monthly summary status



Where We Are

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- The Agency IT PMB today oversees these programs and projects
 - Information Technology Infrastructure Integration Program (I3P)
 - IT Security Program
 - Aircraft Management Module (AMM)
 - Electronic Health Record System (EHRS)
 - eTravel
 - Human Capital Information Environment (HCIE)
 - NASA Consolidated Active Directory (NCAD)
 - NASA's Operational Messaging and Directory (NOMAD)
 - Security Operations Center (SOC)



Where We Are

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- **Center IT PMBs**
 - Virtually all the Centers have stood up IT PMBs to oversee their IT projects
 - Membership and reporting structure vary from Center to Center and reflect how the Centers believe their IT projects should be overseen
 - We expect some changes in how the Center IT PMBs operate as Centers gain more experience with the new governance structure
- **Center IT PMB Working Group**
 - Promotes sharing of information in support of oversight of IT programs and projects performed by Agency level and Center level IT PMBs.
 - Promotes the success of NASA IT programs and projects by collaborating to share information concerning the Project Management Office (PMO)/project management support provided by the Agency and Center Offices of the CIO (OCIO)



Where We Are

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- **Benefits of New IT Governance Structure**
 - Projects feel more accountable at both the Agency and Center levels: more attention to project management disciplines leading, we hope, to better outcomes
 - Program/project issues addressed early in the life cycle
 - Agency IT PMB members are strong advocates for the projects
 - Mission Directorates and Centers have been generous in providing members who are highly experienced in program/project management and have a positive attitude
 - There is special emphasis on risk management and ensuring that projects recognize and deal with significant risks
 - Members look for ways to help the projects -- real emphasis on helping the project manager: they do not operate in “gotcha” mode



Where We Are Going

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- Both Agency and Center IT PMBs need to expand the number of projects they oversee and mature their processes
 - New Agency-level projects will be spawned by the I3P program, for example, as IT infrastructure consolidations/improvements proceed
 - Especially at Agency level, work with Mission Directorates to address situations where projects contain a mix of Highly Specialized and Non-Highly Specialized IT
 - Centers have generally started conservatively with project oversight and will add more projects as they gain experience
 - Need to improve how Non-Advocacy Reviews (NARs) are planned/conducted; work on an approach analogous to the mission side's Standing Review Board; and, improve templates for program/project KDP briefings
- Better coordinate Agency and Center IT PMB oversight to ensure consistent approaches to governance and messages to projects



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Questions?